

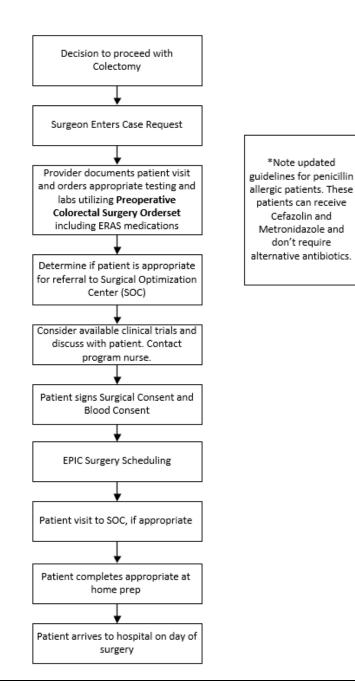
Clinical Pathways Program

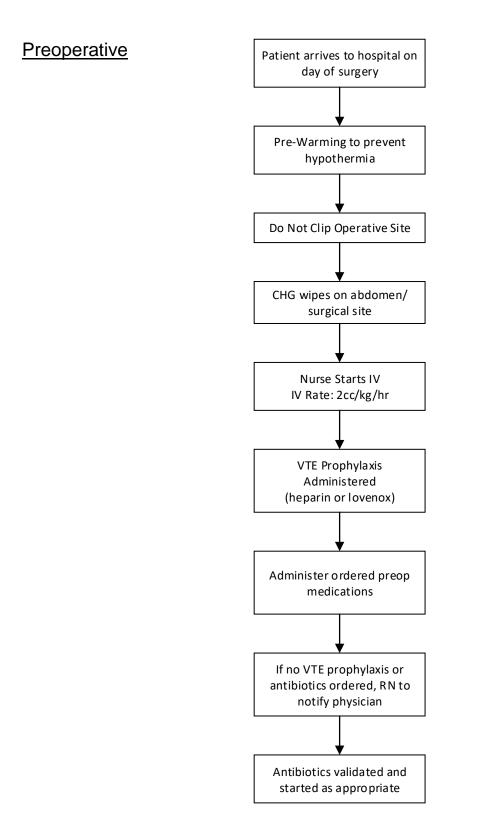
COLECTOMY, INPATIENT, PATHWAY

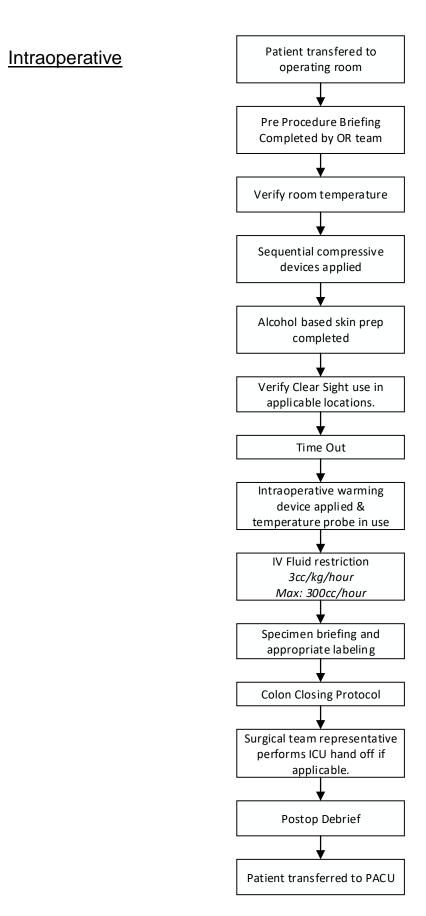
Updated: August 23, 2022

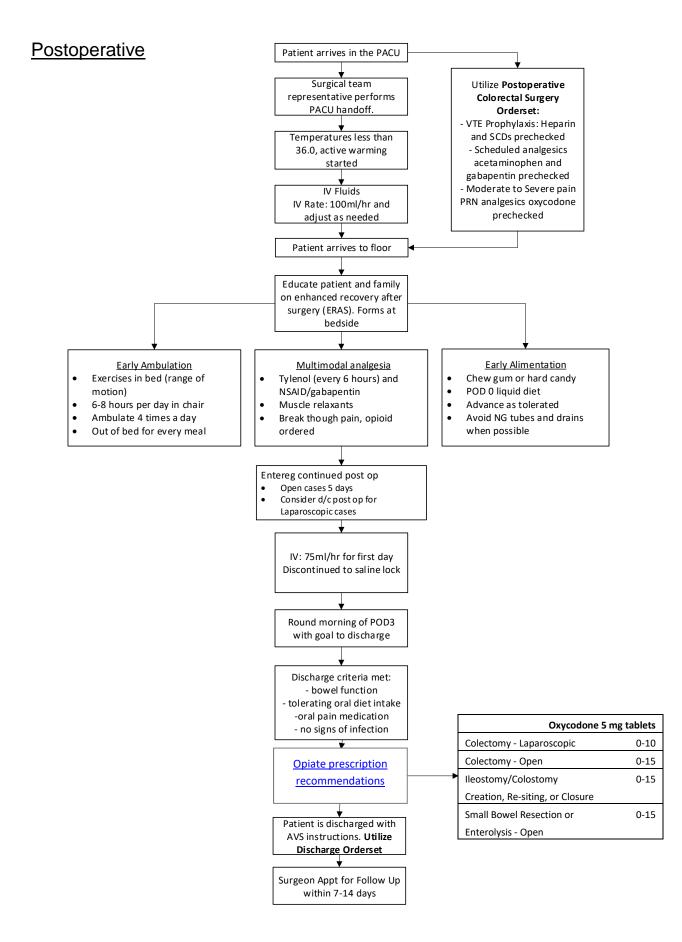
Clinical algorithm:

PreProcedure









Clinical pathway summary

CLINICAL PATHWAY NAME: Colectomy

PATIENT POPULATION AND DIAGNOSIS: Adult patients undergoing elective colorectal resections.

APPLICABLE TO: All Spectrum Health locations

BRIEF DESCRIPTION: To optimize and standardize multidisciplinary perioperative care for patients undergoing colorectal surgery from decision to perform surgery to postoperative follow up appointment.

OPTIMIZED EPIC ELEMENTS:

UPDATED Preoperative Colorectal Surgery Orderset UPDATED Postoperative Colorectal Surgery Orderset NEW Colorectal Surgery Discharge Orderset

PATIENT EDUCATION:

Educational materials included in ordersets UPDATED Colorectal Surgery brochure NEW patient roadmap

IMPLEMENTATION DATE: October 27, 2022

LAST REVISED: August 23, 2022

Clinical pathways clinical approach

TREATMENT AND MANAGEMENT:

The colectomy pathway aims to reduce surgical site infections with colorectal surgery while also minimizing length of stay which is best done through multiple interventions. This includes elements of both surgical site reduction bundles and enhanced recovery after surgery (ERAS) practices. There is considerable overlap between the bundles and ERAS. The revised order sets support these recommendations.

Appropriate antibiotic use. Timing for appropriate preoperative prophylactic antibiotic administration was clarified. Current guidelines for penicillin allergies suggest reducing the use of alternative antibiotics. Multiple studies now confirm that both oral and intravenous antibiotics are needed to minimize surgical site infections.

Preoperative prophylactic anticoagulation. Surgical patients are often high risk for postoperative DVT and should be considered for preoperative prophylactic anticoagulation use.

Preoperative Alvimopam (Entereg) Alvimopam been shown to reduce narcotic-related postoperative ileus and reduce length of stay in post-operative colorectal patients **Referral to the Surgical Optimization Center (SOC).** The majority of patients that require colectomy have additional medical problems. Preoperative management and risk assessment done by the surgical optimization center is preferred in most cases.

Pre- and post-operative order set supports pre and post-operative multimodal pain management. Post-operative pain management has been shown to be better with both multimodal approaches and with preoperative intervention. The increased use of regional anesthetic blocks and long-acting local anesthetics has also greatly reduced narcotic use, overall pain, post-operative ileus, and length of stay.

Post-operative fluid administration. The evidence for outcome improvement by optimizing post-operative fluid administration is well established especially by preventing fluid overload. Intravenous fluids should start at a lower rate and have timed discontinuation parameters.

Appropriate opiate prescribing practices for discharge. The focus on appropriate use of opiates has spurred the creation of suggested appropriate post-operative opiate prescribing. The discharge process for this pathway will help providers by giving them links to these guidelines.

Standardized perioperative patient education. Comprehensive and consistent education should be provided to patients to support positive outcomes and enhance the patient experience.

Pathway information

OWNER(S): Don Kim, MD; Marti Luchtefeld, MD; Andrew Parsons, MD

CONTRIBUTOR(S): Jennifer Pray PA, Brittany Hoyte PharmD, Cheryl Houseman CNS

EXPERT IMPROVEMENT TEAM (EIT): N/A

CLINICAL PRACTICE COUNCIL (CPC): Digestive Health

CPC APPROVAL DATE: October 27, 2022

OTHER TEAM(S) IMPACTED: Anesthesia, Surgical Optimization Center, surgical office

References

Evidence-based Prevention of Surgical Site Infection. Fuglestad MA, Tracey EL, Leinicke JA.Surg Clin North Am. 2021 Dec;101(6):951-966. <u>Strategies for Antibiotic Administration for Bowel Preparation Among Patients Undergoing</u> <u>Elective Colorectal Surgery: A Network Meta-analysis.</u>

Woodfield JC, Clifford K, Schmidt B, Turner GA, Amer MA, McCall JL.JAMA Surg. 2022 Jan 1;157(1):34-41.

<u>Alvimopan Significantly Reduces Length of Stay and Costs Following Colorectal Resection and</u> <u>Ostomy Reversal Even Within an Enhanced Recovery Protocol.</u>

Hyde LZ, Kiely JM, Al-Mazrou A, Zhang H, Lee-Kong S, Kiran RP.Dis Colon Rectum. 2019 Jun;62(6):755-761.

Male sex, ostomy, infection, and intravenous fluids are associated with increased risk of postoperative ileus in elective colorectal surgery.

Koch KE, Hahn A, Hart A, Kahl A, Charlton M, Kapadia MR, Hrabe JE, Cromwell JW, Hassan I, Gribovskaja-Rupp I.Surgery. 2021 Nov;170(5):1325-1330.

<u>Guidelines for Perioperative Care in Elective Colorectal Surgery: Enhanced Recovery After</u> <u>Surgery (ERAS[®]) Society Recommendations: 2018.</u>

Gustafsson UO, Scott MJ, Hubner M, Nygren J, Demartines N, Francis N, Rockall TA, Young-Fadok TM, Hill AG, Soop M, de Boer HD, Urman RD, Chang GJ, Fichera A, Kessler H, Grass F, Whang EE, Fawcett WJ, Carli F, Lobo DN, Rollins KE, Balfour A, Baldini G, Riedel B, Ljungqvist O.World J Surg. 2019 Mar;43(3):659-695.

Opioid Prescribing Recommendations - Michigan OPEN (michigan-open.org)